

**REMARKS**

The Application has been carefully reviewed in light of the final Office Action mailed April 22, 2003. Although Applicants believe all original claims are allowable without amendment, to expedite issuance of the Application, Applicants have made clarifying amendments to Claims 5, 10-14, 16, 18, 22-25, 28-29, and 31. Applicants have also re-presented cancelled dependent Claim 3 as new independent Claim 34. None of these amendments is considered necessary for patentability. Pursuant to 37 C.F.R. § 1.116, Applicants submit that these amendments do not raise new issues and will not require further searching. If the Examiner maintains the Examiner's rejections, these amendments will also place the Application in better condition for appeal. Accordingly, Applicants respectfully request that these amendments be entered. Applicants respectfully request reconsideration and allowance of all pending claims.

**All Subject Matter in Applicants' Claims is Fully  
Described in the Specification**

The Examiner rejects Claims 12, 14-15, 18, and 22-23 under paragraph 1 of 35 U.S.C. § 112 as containing subject matter that, according to the Examiner, "was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." Applicants have made clarifying amendments to the claims and respectfully request that the Examiner withdraw the rejection of Claims 12, 14-15, 18, and 22-23 under paragraph 1 of 35 U.S.C. § 112.

**Applicants' Claims are Allowable Over the  
Proposed Combinations**

The Examiner rejects Claims 5-7, 9-11, 13, 15, 16, and 18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,646,090 to Mawhinney ("*Mawhinney*") in view of U.S. Patent No. 6,433,671 to Nysen ("*Nysen*"). The Examiner rejects Claims 19-21, 24, 25, 28, 29 and 31-33 under 35 U.S.C. § 103(a) as being unpatentable over *Mawhinney* in view of *Nysen* and in further view of U.S. Patent No. 6,371,379 to Dames et al. ("*Dames*").

The Examiner rejects Claim 27 under 35 U.S.C. § 103(a) as being unpatentable over *Mawhinney* in view of *Nysen*, in further view of *Dames*, and in further in view of U.S. Patent No. 6,094,133 to Shimamura et al. (“*Shimamura*”). The Examiner does not reject dependent Claim 8, but provides no indication that Claim 8 has been allowed.

Independent Claim 5 of the Application, as amended, recites:

An harmonic article identification system, comprising:  
at least one semiconductor device carried by an article and responsive to at least two RF signals to generate an harmonic intermodulation product as output;  
an antenna receiving an harmonic intermodulation product and, in response to the antenna receiving the harmonic intermodulation product, generating an analyzer signal; and  
a signal analyzer coupled to the antenna and responsive to the analyzer signal to identify the article carrying the at least one semiconductor device.

Independent Claims 10, 18, 24, and 31 recite certain substantially similar limitations.

Neither *Mawhinney*, *Nysen*, *Dames*, nor *Shimamura* disclose, teach, or suggest limitations recited in independent Claim 5, whether these references are considered individually or in combination with each other or with information that was generally known to those of ordinary skill in the art at the time of the invention. As an example, none of these references discloses, teaches, or suggests

- at least one semiconductor device carried by an article and responsive to at least two RF signals to generate ***an harmonic intermodulation product*** as output; or
- an antenna receiving ***the harmonic intermodulation product*** and, in response to the antenna receiving ***the harmonic intermodulation product***, generating an analyzer signal.

*Mawhinney* merely discloses a tag radiating a signal that is the sum, difference, or sum and difference between two RF frequencies. *Mawhinney* also discloses a tag being irradiated with a single RF signal from a single interrogating unit and radiating back to the same interrogating unit a harmonic signal that is a multiple of the single RF signal, but nowhere does *Mawhinney* disclose, teach, or even suggest a ***harmonic intermodulation***

*product*, as recited in independent Claim 5. Neither *Nysen*, *Dames*, nor *Shimamura* in any way account for this deficiency of *Mawhinney*.

Accordingly, for at least these reasons, Applicants respectfully request allowance of independent Claims 5, 10, 18, 24, and 31 and all their dependent claims.

**Applicants Respectfully Request Evidence of the Teachings, Suggestions, or  
Motivations to Make the Proposed Combinations**

The Examiner states that it would have been obvious to combine *Mawhinney*, *Nysen*, *Dames*, and *Shimamura* with each other in various ways to realize certain advantages, but the Examiner does not show that these advantages are disclosed, taught, or suggested in *Mawhinney*, *Nysen*, *Dames*, *Shimamura*, or any other reference or in the knowledge that was generally available to those of ordinary skill in the art at the time of the invention.

The Examiner states that the teaching, suggestion, or motivation to make the proposed combinations “does not need to be in references themselves, it can be from the knowledge generally available to one of ordinary skill in the art.” Applicants respectfully submit that, while “[e]vidence of a suggestion, teaching, or motivation to combine [or modify] may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved,” the “the range of sources available . . . does not diminish the requirement for actual evidence.” *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999); *see also In Re Jones*, 958 F.2d 347, 351 (Fed. Cir. 1992) (“Conspicuously missing from this record is any evidence, other than the PTO’s speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at” the claimed invention.). The Examiner has provided no such evidence.

According to the M.P.E.P., “[i]t is never appropriate to rely solely on ‘common knowledge’ in the art[,] without evidentiary support in the record, as the principal evidence upon which a rejection [is] based.” M.P.E.P. § 2144.03 (February 2003). “If applicant

adequately traverses the examiner's assertion [that information was well known to those of ordinary skill in the art at the time of the invention,] the examiner must provide documentary evidence." *Id.* "If the examiner is relying on personal knowledge to support the finding of what [was well] known [to those of ordinary skill] in the art [at the time of the invention], the examiner must provide an affidavit or declaration setting forth specific factual statements and explanations to support the finding." *Id.*

Applicants respectfully request that the Examiner provide references that support the Examiner's assertions that it would have been obvious, to those of ordinary skill in the art at the time of the invention, to combine *Mawhiney* with *Nysen*, *Dames*, and *Shimamura* as proposed. Applicants further respectfully request that, if the Examiner is relying on personal knowledge, the Examiner provide an affidavit of all the relevant facts.

#### **Allowable Subject Matter**

Applicants note with appreciation the Examiner's indication that Claims 3, 12, 14, 17, 22-23, 26, and 30 contain allowable subject matter. Dependent Claim 3 was cancelled in Applicants' previous response, but has been re-presented as new independent Claim 34. Clarifying amendments have been made to independent Claims 22-23. Clarifying amendments have also been made to dependent Claims 12, 14, 17, 26, and 30 or their independent claims, but, since Applicants have shown all pending independent claims to be allowable, Applicants have not amended dependent Claims 12, 14, 17, 26, and 30 to include all the limitations of their independent claims. Applicants respectfully request full allowance of Claims 12, 14, 17, 22-23, 26, 30, and 34.

**Conclusion**

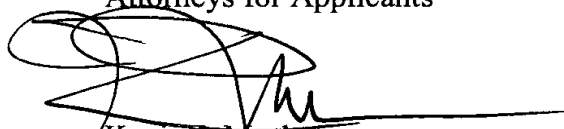
For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request reconsideration and allowance of all pending claims.

If the Examiner believes that a telephone conference would advance prosecution of this Application, the Examiner is invited to contact Kevin J. Meek, Attorney for Applicants, at 214.953.6680 at the Examiner's convenience.

A check in the amount of \$102 is attached for the addition of one independent claim over 3 and the addition of one claim over 20. The Commissioner is hereby authorized to charge any fee and credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.  
Attorneys for Applicants



Kevin J. Meek  
Reg. No. 33,738

**Date:** June 23, 2003

**Correspondence Address:**

Customer Number or Bar Code Label:

